

PUBLICATIONS, PRESENTATIONS & RELATED ACTIVITIES

CHAPTER

Peer-Reviewed Publications

This section includes articles that appeared in print in 1999 journals and peer-reviewed conference proceedings.

- Adhikari, B.; Somerset, J.; Stull, J.T. and Fajer, P.G., *Dynamic modulation of regulatory domain of myosin heads by pH, ionic strength and RLC phosphorylation in synthetic myosin filaments*, Biochemistry, **38**, 3127-2132 (1999).
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Presentations & Posters

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- Zachariah, K. and Edison, A. *Structure-function studies of RGD-containing FLPs*, 30th Southeastern Magnetic Resonance Conf., Tallahassee, FL, Nov. 4-6, 1999.
- Zachariah, K. and Edison, A., *Structural basis of precursor protein processing using NMR spectroscopy*, 40th Experimental NMR Conf., Orlando, FL, Feb. 28-March 5, 1999.
- Zeller, A.F.; Bazin, D.; Bird, M.D.; DeKamp, J.C.; Eyssa, Y.; Hansen, P.G.; Kemper, K.W.; Morris, L.; Prestemon, S.; Sherrill, B.S.; Thoennessen, M. and Van Sciver, S.W., *A Compact Sweeper Magnet for Nuclear Physics*, CEC/ICMC 99, Montréal, Québec, Canada, July 12-16, 1999.
- Zheng, J.P. and Fu, R. *NMR Study of Hydrogen Storage and Transfer Mechanisms in Ruthenium Oxides Used in Electrochemical Capacitors*, 8th Int. Seminar on Double Layer Capacitors and Similar Energy Storage Devices, Deerfield Beach, FL, Dec. 7-9, 1999.
- Zhu, Z.; Long, V.C.; Musfeldt, J.L.; Wei, X.; Sarrao, J.; Fisk, Z.; Negishi, H.; Inoue, M.; Koo, H.-J. and Whangbo, M-H., *High Field Optical Response of η -Mo₄O₁₁*, Electronic Crystals (ECRYS99) Conf., Nice, France, June, 1999.
- Zhu, Z.; Long, V.C.; Musfeldt, J.L.; Wei, X.; Sarrao, J.; Fisk, Z.; Negishi, H. and Inoue, M., *Optical Properties of η -Mo₄O₁₁ in High Magnetic Fields*, American Physical Society March Meeting, Atlanta, GA, March 20-26, 1999.
- Zhu, Z.; Musfeldt, J.L.; ang, Y.J.; Sarrao, J.; Fisk, Z.; Negishi, H. and Inoue, M., *Infrared Properties of η -Mo₄O₁₁ in High Magnetic Fields*, American Physical Society March Meeting, Atlanta, GA, March 20-26, 1999.
- Zhu, Z.; Musfeldt, J.L.; Wang, Y.J.; Negishi, H.; Inoue, M.; Sarrao, J. and Fisk, Z., *Far Infrared Investigations of η -Mo₄O₁₁: Using a Magnetic Field to Open the Gap*, Low Energy Excitations in Solids, Pecs, Hungary, June, 1999.
- Zook, T.; Storhaug, V.; Adhyaru, B.; Benson, E. and Bowers, C.R., *In-Situ 129Xe Optical Pumping and Delivery System*, 30th Southeastern Magnetic Resonance Conf., Tallahassee, FL, Nov. 4-6, 1999.
- Zou, H. and Zindler, A., *Quantitative Modeling of Uranium-series Disequilibria Produced by Mantle Dynamic Melting*, American Geophysical Union Fall Meeting, 1999.
- Zvyagin, S.; Orendac, M.; Orendacova, A.; Feher, A.; Sieling, M.; Luethi, B. and Meisel, M.W., *Single-Ion Bound States in S=1 Heisenberg AFM Chains with Planar Anisotropy and Subcritical Exchange Coupling*, 30th Southeastern Magnetic Resonance Conf., Tallahassee, FL, Nov. 4-6, 1999.
- Zvyagin, S.; Sieling, M.; Schmidt, S.; Wolf, B.; Kouroudis, I.; Low, U. and Luethi, B., *High Magnetic Field ESR in Low-Dimensional Magnets*, 30th Southeastern Magnetic Resonance Conf., Tallahassee, FL, Nov. 4-6, 1999.

Related Activities

Books, Chapters, Reviews and Other One-Time Publications

- Cross, T.A.; Tian, F.; Cotten, M.; Wang, J.; Kovacs, F. and Fu, R., "Correlations of Structure, Dynamics and Function in the Gramicidin Channel by Solid State NMR" *Proceedings of the Novartis Foundation Symposium No. 225: Gramicidin and Related Ion Channel-Forming Peptides*.
- Fisk, Z.; Gor'kov, L. and Schrieffer, J.R., eds. Proc. Physical Phenomena at High Magnetic Fields-III (World Scientific, Singapore, 1999).
- Fu, R. and Cross, T.A., "Solid-State NMR Investigation of Protein and Polypeptide Structure," *Annual Rev. Biophys. Biomol. Struct.*, **28**, 235-268 (1999).
- Jaime, M. and Salamon, M.B., "Electronic Transport in La-Ca Manganites" in *Physics of Manganites*, eds. Kaplan T.A. and Mahanti S.D. (Kluwer Academic/Plenum Publishers, New York, 1999), pg. 243.

Lavine, B.K.; Hendayana, S.; Cooper, W.T. and He, Y. in J.F. Scamehorn and J.H. Harwell, eds., "Selectivity in Micellar Liquid Chromatography: Surfactant Bonded Phase Interactions," in *Surfactant-Based Separations; Science and Technology*, ACS Symposium Series # 740, Chapter 18, pp 290-313, 1999.

Internet Dissemination

- Hill, S.; Brooks, J.S.; Mao, Z.Q. and Maeno, Y., *Cyclotron Resonance in the Layered Perovskite Superconductor Sr₂RuO₄*, cond-mat/9905147 (12th May 1999).
- Mola, M.; Hill, S.; Goy, P. and Gross, M., *Instrumentation for Millimeter-wave Magnetoelectrodynamic Investigations of Low-Dimensional Conductors and Superconductors*, cond-mat/9907310 (20th July 1999).
- Smith, S.A., GAMMA: <http://gamma.magnet.fsu.edu>

Other Specific Products

Brey, W.W. and Allen, S.D., "Laser-Assisted Fabrication of NMR Resonators," Patent Pending, Ser. No. 60/163,402, filed Nov. 4, 1999.

Hillman, J.D. "Antimicrobial Polypeptide, Nucleic Acid, and Method of Use," U.S. patent number 5,932,469, Aug. 3, 1999.

Hilton, D.K.; Weijers, H.W.; Hascicek, Y.S. and Van Sciver, S.W., "System and Method for Performing Tensile Stress-Strain and Fatigue Tests," U.S. Patent 5,907,102, May 25, 1999.

Marshall, Alan, G., ed. *NHMFL ICR/Ion Trap Newsletter* (4 issues/year)

Smith, S.A., *GAMMA: The Magnetic Resonance Simulation Package*

Awards, Honors, Service

Erin N. Blumer

- American Chemical Society Travel Award

Timothy A. Cross

- Elected to the Biophysical Society Council

Elbio E. Dagotto

- Member, FSU Council of Research and Creativity
- Selected as Fellow of American Physical Society
- Divisional Associate Editor, representing Division of Condensed Matter, *Physical Review Letters*

Jeffrey K. Denny

- NSF Research and Training Grant Fellowship in macromolecular assemblies

Lev P. Gor'kov

- Humboldt Research Award for Senior U.S. Scientists

Timothy A. Logan

- R.J. Boucek Research Award Winner, American Heart Association
- Lonza Research Creativity Prize Award Winner, Lonza Biologics

Alan G. Marshall

- FSU Distinguished Professor Award

Alan G. Marshall and Melvin B. Comisarow

- American Society for Mass Spectrometry Distinguished Contribution Award

Timothy Moerland

- FSU University Teaching Award

Adriana Moreo

- Senate Member at FSU
- Member at Large, Division of Computational Physics of APS
- Chair of the NHMFL Theory Seminar Committee

Ryan P. Rodgers

- American Chemical Society Analytical Graduate Fellowship

J. Robert Schrieffer

- Guggenheim Foundation Awards Committee
- Member, Advisory Board, Asia Pacific Center for Theoretical Physics
- Consultant, Superconductor Technologies Inc.
- Member of the International Advisory Board of the Max-Planck-Institut fur Physik Komplexer Systeme in Dresden
- Member President's Committee on the National Medal of Science
- Member Theoretical Division Review Committee, LANL
- Laboratory Fellow, LANL

Stone D.-H. Shi

- FSU Chemistry Department Johnsen Dissertation Award

Gregory Stewart

- Elected to the Executive Committee of the APS Topical Group on Instrument and Measurement Science

Recognition (Features about ICR Research)

NSF Instrumentation Workshop, featured in *Chem. & Eng. News* **1999**, 71 (29 March), 35.

Dutch National FT-ICR Facility to be modeled after NHMFL: *Chemischekweekblad* 9 (8 May, 1999), 22-(Dutch Chemical Magazine. Web site: www.c2w.nl)

Followup to *JASMS* **1997**, 8, 380-383, featured in *Science* **1999**, 284, 1289-1290.

Grants

PI: R. Abbaschian

Grant Title: *In-Situ* Monitoring of Crystal Growth Using Mephisto

Agency: NASA

Project Dates: 05/22/96-05/21/99

Award Amount: \$76,998

PI: R. Abbaschian

Grant Title: *In-Situ* Monitoring of Crystal Growth Using Mephisto

Agency: NASA

Project Dates: 05/22/96-08/06/00

Award Amount: \$65,000

PI: R. Abbaschian, R.K. Singh
Grant Title: Request for Crystal Growth for Diamond and Other Materials
Agency: Gemesis Corporation
Project Dates: 04/01/98-03/01/00
Award Amount: \$95,075

PI: R. Abbaschian, R. K. Singh
Grant Title: Request for Crystal Growth for Diamond and Other Materials
Agency: Gemesis Corporation
Project Dates: 04/01/98-03/01/00
Award Amount: \$28,150

PI: C. Abernathy
Grant Title: Microwave Power HBTS With Regrowth Base Regions
Agency: U.S. Navy
Project Dates: 03/01/99-03/01/00
Award Amount: \$94,120

PI: C. Abernathy
Grant Title: Synthesis & Characterization of INT1P & INT1AS
Agency: U. S. Air Force
Project Dates: 02/15/96-02/14/99
Award Amount: \$28,338

PI: C. Abernathy
Grant Title: Synthesis & Characterization of Rare Earth Doped Wide Bandgap Materials
Agency: U.S. Army
Project Dates: 04/01/98-03/31/01
Award Amount: \$100,000

PI: C. Abernathy, F. Ren
Grant Title: Development of Gan Mosfets and Misfets
Agency: U. S. Navy
Project Dates: 01/01/98-12/31/00
Award Amount: \$63,131

PI: E. D. Adams
Grant Title: Magnetic Ordering In Solid ^3He
Agency: NSF
Project Dates: 08/15/98-07/31/01
Award Amount: \$80,000

PI: E. D. Adams, Y. Takano
Grant Title: Neutron Study of Magnetically Ordered Solid ^3He
Agency: NSF
Project Dates: 03/01/99-02/28/01
Award Amount: \$23,800

PI: P. Andren, M. R. Emmett
Grant Title: Ultrahigh-Resolution Electrospray FT-ICR Mass Spectrometry: High Mass Resolution, Identification and Trace Analysis of Biomolecules
Agency: Swedish Foundation for International Cooperation in Research and Higher Education
Project Dates: 12/01/99-11/20/00

PI: P. J. Antonelli, S. J. Blackband
Grant Title: Functional Magnetic Resonance Imaging of the Feline Central Auditory System
Agency: Deafness Research Foundation
Project Dates: 01/01/99-12/31/00
Award Amount: \$12,339

PI: R. J. Bartlett, H. P. Cheng
Grant Title: Multi-Scale Simulation of Materials Behavior through Integrated Computational Hierarchies
Agency: NSF
Project Dates: 09/15/99-08/31/02
Award Amount: \$1,220,592

PI: S. J. Blackband
Grant Title: Automatic Shape Recovery of Hippocampus from Brain MRI
Agency: National Institutes of Health
Project Dates: 09/30/98-08/31/01
Award Amount: \$72,124

PI: S. J. Blackband, M. I. Phillips
Grant Title: NMR Microscopy of Single Neural Cells and Brain Slices
Agency: National Institutes of Health
Project Dates: 05/15/98-02/28/01
Award Amount: \$193,736

PI: N. E. Bonesteel
Grant Title: Correlated Electrons in Reduced Dimensions
Agency: U.S. Department of Energy
Project Dates: 6/1/99-5/31/00
Award Amount: \$42,750

PI: C. R. Bowers
Grant Title: Enhanced Sensitivity NMR Studies of Nanostructured Electronic Materials
Agency: NSF
Project Dates: 05/01/96-04/30/00
Award Amount: \$75,000

PI: J. S. Brooks
Grant Title: High Magnetic Field Probes of Electronic and Magnetic Structure in Low Dimensional and Electron Systems
Agency: NSF
Project Dates: 7/1/99-7/31/00
Award Amount: \$105,000

PI: N. Chandra
 Grant Title: Atomic and Mososcopic Simulation of Grain Boundary Sliding in Bicrystals
 Agency: Lawrence Livermore National Laboratory
 Project Dates: 7/7/99-12/31/99
 Award Amount: \$34,955

PI: W. T. Cooper
 Grant Title: Evaluation of Residual Soil-Bound Pesticide Residues Utilizing Supercritical Fluid Extraction
 Agency: Florida Dept. of Environmental Protection
 Project Dates: 04/01/99-03/31/01

PI: W. T. Cooper, V.J.M Salters, *et al.*
 Grant Title: The Speciation and Sources of Dissolved Phosphorus in the Everglades
 Agency: South Florida Water Management District
 Project Dates: 11/06/97-03/15/99
 Award Amount: \$185,000

PI: T. A. Cross
 Grant Title: Structure-Dynamics Function in Gramicidin
 Agency: National Institute of Allergy and Infectious Diseases
 Project Dates: 1/1/99-2/29/00
 Award Amount: \$222,111

PI: T. A. Cross
 Grant Title: Solid State NMR Derived Structure: Membrane Bound Polypeptides to Proteins
 Agency: NSF
 Project Dates: 2/1/99-1/31/00
 Award Amount: \$120,000

PI: B. A. Crosson, R. W. Briggs
 Grant Title: Medical Frontal Cortex in Intentional Aspects of Language
 Agency: National Institutes of Health
 Project Dates: 08/01/97-07/31/00
 Award Amount: \$188,260

PI: J. E. Crow
 Grant Title: Eastern Europe Program
 Agency: NSF
 Project Dates: 5/26/99-12/31/00
 Award Amount: \$168,150

PI: E. Dagotto
 Grant Title: Computational Studies of Electronic Models for Ladders and Planes
 Agency: NSF
 Project Dates: 11/1/99-10/31/00
 Award Amount: \$92,000

PI: V. Dobrosavljevic
 Grant Title: Alfred P. Sloan Research Fellowship
 Agency: Alfred P. Sloan Foundation
 Project Dates: 09/15/97-06/30/00
 Award Amount: \$50,000

PI: V. Dobrosavljevic
 Grant Title: Theory of Metal Insulator Transitions in Strongly Correlated Electronic Systems with Disorder
 Agency: NSF
 Project Dates: 7/15/99-6/30/00
 Award Amount: \$50,000

PI: A. T. Dorsey
 Grant Title: Dynamics of Vortices and Interfaces in Condensed Matter
 Agency: NSF
 Project Dates: 10/15/99-09/30/02
 Award Amount: \$92,000

PI: A. T. Dorsey, J. M. Yelton
 Grant Title: GAANN at the University of Florida, Physics Dept.
 Agency: U.S. Department of Education
 Project Dates: 08/15/98-08/14/01
 Award Amount: \$126,875

PI: E. P. Douglas
 Grant Title: Structure Property Relationships in Liquid Crystalline Thermosets
 Agency: U.S. Army
 Project Dates: 03/01/98-02/28/03
 Award Amount: \$100,000

PI: E. P. Douglas
 Grant Title: Symposium on Molecularly Ordered Networks
 Agency: U. S. Army
 Project Dates: 07/01/99-06/30/00
 Award Amount: \$3,500

PI: E. P. Douglas
 Grant Title: Symposium on Molecularly Ordered Networks
 Agency: U. S. Army
 Project Dates: 07/01/99-06/30/00
 Award Amount: \$3,500

PI: J. W. Dufty
 Grant Title: Charge Dynamics in High Energy Density Matter
 Agency: U.S. Department of Energy
 Project Dates: 03/15/98-03/14/01
 Award Amount: \$59,000

PI: J. W. Dufty
 Grant Title: Charged Particle Dynamics in Nonequilibrium States
 Agency: NSF
 Project Dates: 06/01/97-07/31/00
 Award Amount: \$64,335

PI: J. W. Dufty
 Grant Title: Multi-Scale Simulation of Materials Behavior Through Integrated Computational Hierarchies
 Agency: NSF
 Project Dates: 09/15/99-08/31/02
 Award Amount: \$204,569

PI: A. S. Edison
Grant Title: Research Resources Program for Medical Schools
Agency: Hughes Medical Inst.
Project Dates: 04/01/97-03/31/00
Award Amount: \$2,000

PI: A. S. Edison
Grant Title: NMR Studies of the Cardioactive Neuropeptide FMRFamide Bound to the FMRFamide-Gated Sodium Channel
Agency: American Heart Assn., Florida
Project Dates: 07/01/97-06/30/00
Award Amount: \$75,000

PI: A. S. Edison
Grant Title: Structure and Function of FMRFamide-Like Neuropeptides
Agency: NSF
Project Dates: 06/01/99-05/31/04
Award Amount: \$265,520

PI: A. S. Edison
Grant Title: Undergraduate Supplement for NSF Structure and Function of FMRFamide-Like Neuropeptides-REU
Agency: NSF
Project Dates: 06/01/99-05/31/02
Award Amount: \$6,250

PI: A. S. Edison, B. Dunn
Grant Title: Structure-Function Studies of IA3, a Potent Inhibitor of Yeast Proteinase A
Agency: UF College of Medicine
Project Dates: 1998-1999
Award Amount: \$10,897

PI: A. S. Edison, M. Bubb, R. Lenos
Grant Title: Biophysical Studies of MARCKS
Agency: UF College of Medicine
Project Dates: 1998-1999
Award Amount: \$16,092

PI: W. R. Ellington
Grant Title: Evolution of Cellular ATP Buffering and Energy Transport System
Agency: NSF
Project Dates: 9/1/99-8/31/00
Award Amount: \$91,192

PI: J. R. Eyler
Grant Title: Fourier Transform Mass Spectrometer System Development and Performance Optimization
Agency: Westinghouse Savannah River Co.
Project Dates: 12/11/98-12/31/99
Award Amount: \$92,893

PI: J. R. Eyler, D. H. Powell
Grant Title: Acquisition of a Fourier Transform Ion Cyclotron Resonance Mass Spectrometer
Agency: NSF
Project Dates: 10/01/99-09/30/01
Award Amount: \$420,000

PI: P. G. Fajer
Grant Title: Orientation and Dynamics of Myosin Head Regulatory Domain
Agency: NSF
Project Dates: 9/1/99-8/31/00
Award Amount: \$81,000

PI: Z. Fisk
Grant Title: Correlated Electron Physics in Hexaborides: A Unique Experimental Material
Agency: NSF
Project Dates: 8/1/99-7/31/00
Award Amount: \$91,584

PI: R. Fu, J. Zheng
Grant Title: Solid State NMR Study of the Hydrous Ruthenium Oxide Electrode Materials
Agency: FSU Cornerstone Program
Project Dates: 08/99-07/01
Award Amount: \$96,290

PI: D. Hall
Grant Title: GaAs Monolithic Cantilever Devices for Magnetic Moment Studies
Agency: Sandia National Laboratory
Project Dates: 6/29/99-7/31/00
Award Amount: \$20,000

PI: A. F. Hebard
Grant Title: Investigation of Metal C-60 Interfaces and Layered Thin-Film Structures
Agency: NSF
Project Dates: 12/01/97-11/30/00
Award Amount: \$80,000

PI: A. F. Hebard
Grant Title: Investigation of Metal C-60 Interfaces and Layered Thin-Film Structures
Agency: NSF
Project Dates: 12/01/97-11/30/00
Award Amount: \$80,000

PI: A. F. Hebard
Grant Title: Nanoscale Devices & Novel Engineered Materials
Agency: U.S. Air Force
Project Dates: 11/15/98-02/29/00
Award Amount: \$72,250

PI: S. P. Hershfield, F. Sharifi
 Grant Title: Nanoscale Devices & Novel Engineered Materials
 Agency: U.S. Air Force
 Project Dates: 12/15/95-02/09/00
 Award Amount: \$133,492

PI: P. J. Hirschfeld
 Grant Title: Disordered Electrons in D-Wave Superconductors
 Agency: NSF
 Project Dates: 03/15/99-02/28/01
 Award Amount: \$6,000

PI: P. J. Hirschfeld
 Grant Title: Transport in Unconventional Superconductors
 Agency: NSF
 Project Dates: 07/01/99-06/30/02
 Award Amount: \$156,000

PI: J. K. Ingersent, A. T. Dorsey
 Grant Title: An REU Site in Physics at the University Of Florida
 Agency: NSF
 Project Dates: 04/01/99-03/31/02
 Award Amount: \$69,000

PI: J. K. Ingersent, A. T. Dorsey
 Grant Title: An REU Site in Physics at the University Of Florida
 Agency: NSF
 Project Dates: 04/01/99-03/31/02
 Award Amount: \$22,000

PI: P. Lang, J. Fitzsimmons
 Grant Title: Center for the Study of the Psychology of Emotion and Attention
 Agency: NIH
 Project Dates: 09/30/99-08/31/04
 Award Amount: \$750,366

PI: T. M. Logan
 Grant Title: Regulation of Signal Transduction and Transcription by SH3 Domains
 Agency: American Heart Assn.
 Project Dates: 07/99-06/01
 Award Amount: \$110,000

PI: T. Logan
 Grant Title: Homogeneous Glycoproteins for Structure
 Agency: National Institutes of General Medical Sciences
 Project Dates: 8/1/99-7/31/00
 Award Amount: \$101,194

PI: T. H. Mareci
 Grant Title: MR Evaluation of Spinal Cord Injury & Repair
 Agency: National Institutes of Health
 Project Dates: 06/01/99-05/31/00
 Award Amount: \$25,000

PI: T. H. Mareci
 Grant Title: MRI Core B: Cellular Repair of the Injured Spinal Cord
 Agency: National Institutes of Health
 Project Dates: 09/01/96-08/31/01
 Award Amount: \$107,391

PI: A. G. Marshall
 Grant Title: Mapping Surface Contacts in Bio-Macromolecule Non-Covalent Complexes
 Agency: National Institute of General Medical Sciences
 Project Dates: 8/1/99-7/31/00
 Award Amount: \$185,319

PI: A. G. Marshall
 Grant Title: National High Field FT-ICR Mass Spectrometry Facility
 Agency: NSF
 Project Dates: 1/1/00-12/31/00
 Award Amount: \$1,206,338

PI: D. Maslov
 Grant Title: Career: Mesoscopic Interacting Systems
 Agency: NSF
 Project Dates: 06/15/97-05/31/01
 Award Amount: \$50,000

PI: J. R. Miller
 Grant Title: PEBB Energy Demonstration
 Agency: Office of Naval Research
 Project Dates: 4/1/99-2/1/00
 Award Amount: \$115,000

PI: T. S. Moerland
 Grant Title: Effects of Temperature and Ultrastructure on Solute Diffusion Striated Muscle
 Agency: NSF
 Project Dates: 9/1/99-8/31/00
 Award Amount: \$81,000

PI: S. J. Pearton
 Grant Title: Materials, Process and Device Development and GAN MCTS
 Agency: Electric Power Research Inst.
 Project Dates: 07/01/98-06/30/01
 Award Amount: \$344,510

PI: S. J. Pearton
 Grant Title: Ion Implantation Doping Isolation of III-Nitrides
 Agency: NSF
 Project Dates: 04/15/98-03/31/01
 Award Amount: \$74,584

PI: S. J. Pearton, C. Abernathy
 Grant Title: Materials, Process and Device Development for SIC And GAN MCTS
 Agency: U.S. Department of Defense
 Project Dates: 06/05/98-06/04/01
 Award Amount: \$321,768

PI: S. J. Pearton, C. Abernathy
Grant Title: Materials, Process and Device Development for SIC and GAN MCTS
Agency: U.S. Department of Defense
Project Dates: 06/05/98-06/04/01
Award Amount: \$206,832

PI: S. J. Pearton, J. R. Childress
Grant Title: Nanoscale Devices & Novel Engineered Materials
Agency: U.S. Air Force
Project Dates: 12/15/95-02/29/00
Award Amount: \$904,162

PI: J. R. Quine
Grant Title: Mathematics and Structural Biology at NHMFL
Agency: NSF
Project Dates: 8/1/99-7/31/00
Award Amount: \$99,911

PI: D. E. Richardson, J. R. Eyler
Grant Title: Gas-Phase Chemistry and Spectroscopy of Metal Complex Ions
Agency: NSF
Project Dates: 02/01/98-01/31/01
Award Amount: \$110,000

PI: A. G. Rinzler
Grant Title: Artificial Muscle Arrays
Agency: Allied Signal Inc.
Project Dates: 01/01/99-12/31/99
Award Amount: \$77,530

PI: A. G. Rinzler, A. F. Hebard
Grant Title: Construction of a Nanotube Tip Mounting Workbench for Generation of Nanoscale Probes
Agency: NSF
Project Dates: 07/01/99-06/30/01
Award Amount: \$87,893

PI: V. Salters
Grant Title: Collaborative Research: Experimental Determination of Trace Elements
Agency: NSF
Project Dates: 2/11/99-11/30/99
Award Amount: \$58,197

PI: V. Salters, A. Zindler
Grant Title: Determining the Mineralogy of the MORB-Source Through Nd-Isotopes in Abyssal Peridotites
Agency: NSF
Project Dates: 9/1/99-8/31/00
Award Amount: \$77,270

PI: H. Schneider-Muntau
Grant Title: 16th International Conference on Magnetic Technology Proceedings, Publications and Printing
Agency: Office of Naval Research
Project Dates: 10/1/99-9/30/00
Award Amount: \$5,000

PI: J. Schwartz
Grant Title: U. S. Japan Workshop on High Temperature Superconductivity
Agency: Office of Naval Research
Project Dates: 8/1/99-7/31/00
Award Amount: \$4,900

PI: J. Schwartz
Grant Title: Strain Effects in Bi-Sr-Ca-Cu-O Superconductors: Underlying Limits to Transport Current and Conductor Performance
Agency: Office of Naval Research
Project Dates: 8/15/99-8/14/00
Award Amount: \$119,840

PI: J. Schwartz
Grant Title: Studies on HTS Conductors
Agency: MAGLEV 2000 of Florida Corporation
Project Dates: 6/30/99-5/31/00
Award Amount: \$48,750

PI: M. Sheplak, T. Nishida
Grant Title: MEMS-Based Acoustic Array Technology
Agency: NASA
Project Dates: 10/01/98-12/31/01
Award Amount: \$91,147

PI: J. H. Simmons, C. J. Stanton
Grant Title: Quantum Confinement, Carrier Dynamics, and Interface Processes in Nanostructured Direct/Indirect-Gap
Agency: U.S. Department of Energy
Project Dates: 03/25/91-03/24/01
Award Amount: \$75,541

PI: S. Spiegel
Grant Title: Tobacco Prevention Science Resource Network
Agency: Florida Department of Health
Project Dates: 9/11/99-6/30/00
Award Amount: \$952,980

PI: S. Spiegel
Grant Title: Research Support for In-service and Pre-service Teachers
Agency: NSF
Project Dates: 5/26/99-12/31/00
Award Amount: \$48,750

PI: C. J. Stanton
Grant Title: Quantum-Confinement Effects & Optical Behavior of Intermediate Semiconductor Clusters
Agency: U.S. Department of Energy
Project Dates: 09/25/91-03/24/01
Award Amount: \$44,403

PI: C. J. Stanton
 Grant Title: The Ultrafast Dynamics of Coherent and Incoherent Electrons and Phonons in Condensed Matter Systems
 Agency: NSF
 Project Dates: 02/15/99-01/31/02
 Award Amount: \$83,000

PI: Y. Takano
 Grant Title: Quantum Nuclear Magnets and Superfluid ^4He Innano pores
 Agency: NSF
 Project Dates: 08/15/98-07/31/01
 Award Amount: \$80,000

PI: D. B. Tanner
 Grant Title: Effect of Transport Current on the Infrared Properties of Superconductors
 Agency: Teracomm Research Inc.
 Project Dates: 09/01/98-03/01/00
 Award Amount: \$10,000

PI: D. B. Tanner
 Grant Title: Infrared Studies of Cuprates, Superconductors and Correlated Metals
 Agency: NSF
 Project Dates: 06/01/97-07/31/00
 Award Amount: \$90,000

PI: D. B. Tanner
 Grant Title: Thermos-Optical Response of High-Temperature Superconducting Films
 Agency: NSF
 Project Dates: 07/01/98-06/30/00
 Award Amount: \$41,664

PI: D. B. Tanner, A. F. Hebard
 Grant Title: U.S.-Hungary Research on the Optical Properties of Fullerenes
 Agency: NSF
 Project Dates: 09/01/99-08/31/02
 Award Amount: \$56,700

PI: D. B. Tanner, A. F. Hebard
 Grant Title: U.S.-Hungary Research on the Optical Properties of Fullerenes
 Agency: NSF
 Project Dates: 09/01/99-08/31/02
 Award Amount: \$30,996

PI: D. B. Tanner, A. F. Hebard
 Grant Title: U.S.-Hungary Research on the Optical Properties of Fullerenes
 Agency: NSF
 Project Dates: 09/01/99-08/31/02
 Award Amount: \$25,704

PI: S. B. Trickey
 Grant Title: Multi-Scale Simulation of Materials Behavior Through Integrated Computational Hierarchies
 Agency: NSF
 Project Dates: 09/15/99-08/31/02
 Award Amount: \$203,499

PI: S. Van Sciver
 Grant Title: Resistance Measurements Characterizing Solder Splices between Nb Ti Wires and Cables
 Agency: BWX Technologies
 Project Dates: 3/17/99-4/30/99
 Award Amount: \$3,000

PI: S. Van Sciver
 Grant Title: 100 T Magnet Development Research and Fabrication Services
 Agency: LANL
 Project Dates: 6/1/99-1/31/01
 Award Amount: \$40,560

PI: S. Van Sciver
 Grant Title: Conceptual Design of the Alternating Field Solenoids for the Muon Cooling System
 Agency: Fermi National Laboratory
 Project Dates: 4/6/99-9/30/99
 Award Amount: \$25,000

PI: S. Van Sciver
 Grant Title: Heat and Mass Transport in Horizontal Two Phase He II Vapor
 Agency: NSF
 Project Dates: 7/1/99-6/30/00
 Award Amount: \$80,000

PI: S. Van Sciver
 Grant Title: Liquid Helium Fluid Dynamics Studies
 Agency: U.S. Department of Energy
 Project Dates: 1/1/99-12/31/99
 Award Amount: \$205,000

PI: S. Van Sciver
 Grant Title: MECO Solenoids Design Study
 Agency: New York University
 Project Dates: 4/30/99-9/30/99
 Award Amount: \$30,000

PI: S. Van Sciver, K. Kemper
 Grant Title: MSU/FSU Consortium Development of a Compact Sweeper Magnet for Neutron Coincidence Experiments at the NSCL
 Agency: Michigan State University
 Project Dates: 9/15/98-8/31/01
 Award Amount: \$523,554

PI: J. B. Vaughn
Grant Title: NMR Instrumentation for Undergraduate Chemistry Laboratory: Development and Implementation
Agency: NSF
Project Dates: 8/1/99-7/31/02
Award Amount: \$100,000

PI: S. Von Molnar
Grant Title: Program on Spintronics: Electronically and Photonically Controlled Magnetism in Semi-Conductors
Agency: Office of Naval Research
Project Dates: 9/30/99-9/29/00
Award Amount: \$164,469

PI: Y. Wang
Grant Title: Coastal Wetland Formation and Its Significance to Carbon Sequestration
Agency: Florida A & M University
Project Dates: 5/1/99-8/31/00
Award Amount: \$17,262

PI: L. Williams, S. Blackband
Grant Title: Diffusion Weighted MR and Magnetic Resonance Spectroscopy of Irradiated Rats as a Model of Human Cortical Dysplasia and Intractable Epilepsy
Agency: Howard Hughes Pilot Grant
Project Dates: 1999-2000
Award Amount: \$1,918

PI: E. Wirth, S. Blackband
Grant Title: Transplantation of Cryopreserved Fetal Spinal Cord Tissue: Evaluation by MRI and ^{13}C NMR Spectroscopy
Agency: BSCIRTF
Project Dates: 10/99-10/00
Award Amount: \$34,054

PI: Y. Yang
Grant Title: Dynamics Thermodynamics and Spin Transport in Random Quantum Spin Chains
Agency: NSF
Project Dates: 6/1/99-5/31/00
Award Amount: \$50,000

PI: Z. Zhang, D. B. Tanner
Grant Title: Thermo-Optical Response of High-Temperature Superconducting Films
Agency: NSF
Project Dates: 07/01/98-06/30/00
Award Amount: \$43,336

PI: A. Zindler
Grant Title: U-Th Systematics of Primitive Icelandic Basalts: Building a Foundation for Interpreting U-Th Disequilibrium in MORBs
Agency: NSF
Project Dates: 07/01/96-12/31/00
Award: \$300,000

PI: A. Zindler, V.J.M. Salters, *et al.*
Grant Title: Acquisition of a High Resolution Inductive Coupled Plasma Mass Spectrometer
Agency: NSF
Project Dates: 08/01/96-07/31/00
Award Amount: \$267,500